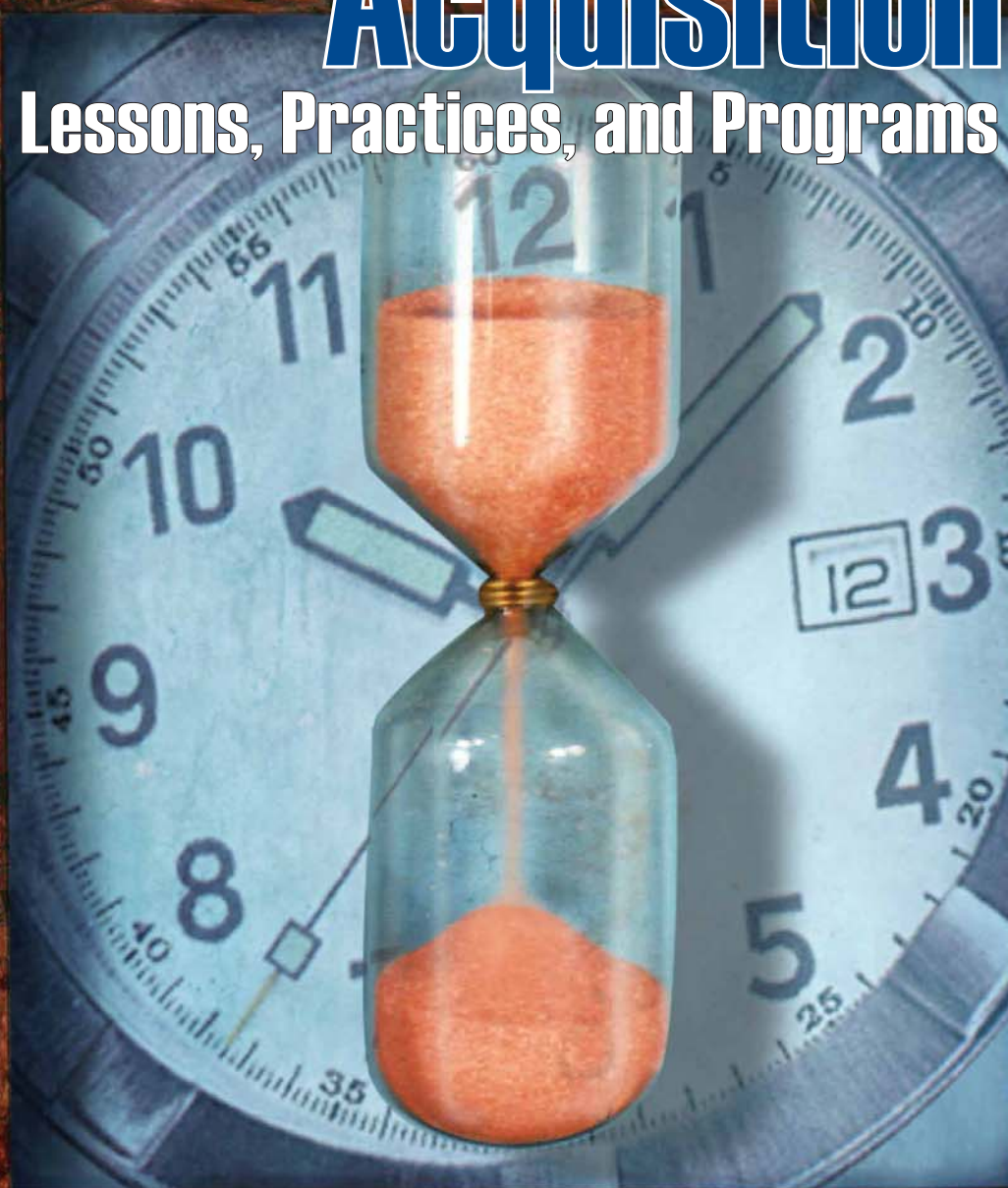


# AIR FORCE JOURNAL *of* LOGISTICS

Volume XXVII,  
Number 4  
Winter 2003

## Contracting and Acquisition

Lessons, Practices, and Programs



*also in this edition:*

Flyaway Costs Versus Individual Components of Aircraft: An Analysis  
AFMC/XPS Logistics Analysis  
XLog21—Purchasing and Supply Chain Management  
Excellence in Writing Contest

<http://www.afhma.hq.af.mil/lgj/Afjlhome.html>

to offset new enemy capabilities. A time-based program is one solution to combat these problems. A time-based program is tailored to deliver a core capability to the warfighter in the near term and then add incremental capabilities in a time line defined by combatant commanders and their needs.

CJCSI 3170.01 spells out a top-down, capabilities-based framework for defining capabilities. The instruction also sets a standard for developing these capabilities. The Joint Capabilities Integration and Development System defines tasks and procedures to ensure warfighting needs are met.

The acquisition community can apply time-based requirements and time-phased programs in either a block upgrade approach or a capabilities-set upgrade cycle. Both systems deliver capability to the warfighter. The block upgrade approach is an existing system to add capability, one weapon system at a time. The capabilities-set approach combines weapon systems to achieve a capability for the combatant commander and then upgrades systems to capitalize on the synergy created by many assets, working together to achieve effects for the warfighter.

Time-based and time-phased programs apply the framework of CJCSI 3170 to bring capability to the warfighter more quickly. All actors in the acquisition process must participate fully in the system for it to be effective. New programs must include time in requirements documents, key performance parameters, and threshold and objective requirements to ensure the time to field a new or existing system upgrade is competed efficiently. This approach needs to start at the top of our requirements generation process and work its way through the defense establishment to assist in fulfilling our national military and security objectives.

## Notes

1. Office of the Secretary of Defense. Memorandum for Secretaries of the Military Departments. Washington DC, 17 Sep 02.
2. CJCSI 3170.01C, *Joint Capabilities Integration and Development System* draft, 20 Jan 03.
3. J. S. Przemieniecki, *Acquisition of Defense Systems*, Washington DC, American Institute of Aeronautics and Astronautics, Inc, 1993.
4. Maj Ross McNutt, "Project Portfolio Management," lecture, Air Command and Staff College, Maxwell AFB, Alabama, 11 Mar 03.
5. AFI 10-601, *Mission Needs and Operational Requirements Guidance and Procedures*, 13 Aug 99.
6. DoDD 5000.1, *The Defense Acquisition System*, Atch 1.
7. CJCSI 3170.01C.
8. *Ibid.*
9. *Ibid.*
10. *Ibid.*
11. Lt Col Jude Fernan, "Joint Requirements Oversight Council Joint Warfighting Capability Assessment Joint Requirements Determination," lecture, Air Command and Staff College, Maxwell AFB, Alabama, 2 Apr 03.
12. *Ibid.*
13. Maj Ross McNutt, personal papers and notes, 15 Mar 03.
14. Headquarters US Air Force, *PEM/AO Survival Guide*, Washington DC [Online] Available: <http://www.safaq.hq.af.mil/training/pemaosurvivalguide/>.
15. Maj Ross McNutt, "Evolutionary Acquisition, Spiral Development and Time-Based Time-Phased Requirements," lecture, Air Command and Staff College, Maxwell AFB, Alabama, 4 Mar 03.
16. Author's interviews with Larry Krussel, Langley AFB, Virginia, 24 Feb and 24 Mar 03.

*Major Shields is Chief, Foreign Materiel Program Branch, Directorate of Test and Evaluation, Headquarters Air Force. At the time of the writing of this article, he was a student at the Air Command and Staff College.*

**JL\***

# Excellence in Writing Contest

## Open to Military and Civilian Authors

### Category 1 - History of Logistics

- 3,000 - 7,500 words in length
- Single or multiple authors
- Focus area - 20<sup>th</sup> century

### Category 2 - Logistics Analysis

- 2,500 to 5,500 words in length
- Single or multiple authors
- Focus area - evolutionary logistics in the 21<sup>st</sup> century

## All Submissions Due by 31 August 2004

Judges from Industry, Academia, and the Military

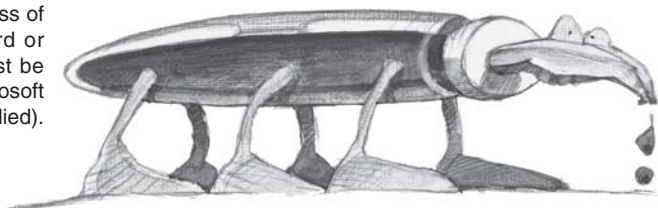
Winners Announced 30 September 2004

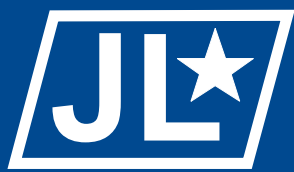
### Winning Article in Each Category—\$100 Prize

The preferred method of submission is via electronic mail (e-mail) to: editor-AFJL@maxwell.af.mil. Manuscripts can also be submitted in hard copy. They should be addressed to the *Air Force Journal of Logistics*, 50 Chennault Circle, Maxwell AFB, AL 36112-6417. If this method is used, a 3.5-inch disk, Zip disk, or compact disk containing an electronic version of the manuscript should accompany the hard copy. Regardless of the method of submission, the basic manuscript should be in Microsoft Word or WordPerfect format, and all supporting tables, figures, graphs, or graphics must be provided in separate files (preferably created in Microsoft Office® products; if Microsoft Excel is used to create any of the charts or figures, the original Excel file must be supplied).

**Sponsored by the Air Force Journal of Logistics  
and Air Force Logistics Management Agency**

**Top Three Articles in Each Category  
Published in the *Air Force Journal of  
Logistics* and a Separate Monograph**





# AIR FORCE JOURNAL of LOGISTICS

Volume XXVII,  
Number 4  
Winter 2003

NEW!

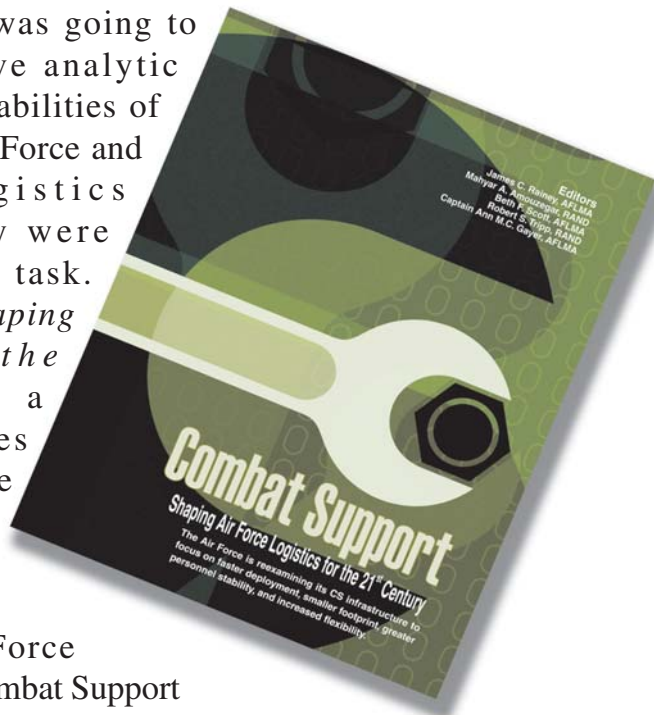
## Contacting the Journal Staff

We've relocated to temporary facilities at Maxwell AFB, Alabama, while our permanent home is undergoing renovation. Planning is for a return to the Gunter Annex address in late 2004. Our temporary address and phone numbers are listed below.

50 Chennault Circle  
Maxwell AFB AL 36112-6417  
Commercial 334 953-0885/0889/0890  
DSN 493-0885/0889/0890

## Available Now

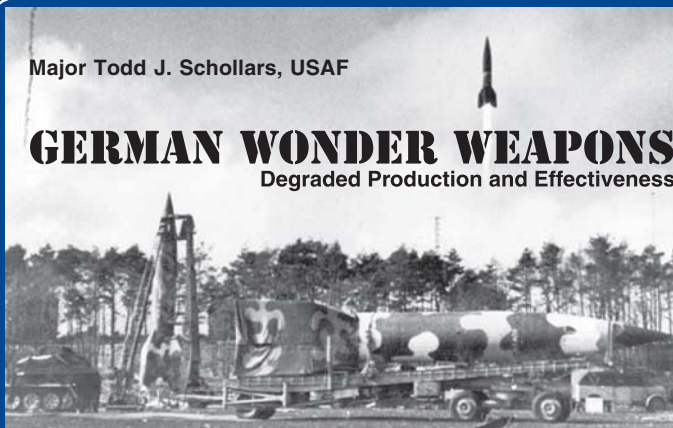
In 1996, shortly after Operation Desert Strike, concern about the long-term requirements of enforcing the no-fly zones, including covering *the carrier gap*, led to the initial concept of an air and space expeditionary force. At that time, the Deputy Chief of Staff, Operations, Lieutenant General John P. Jumper, realized that transforming the Air Force to a more expeditionary footing was going to require comprehensive analytic study. The unique capabilities of both RAND Project Air Force and the Air Force Logistics Management Agency were harnessed to take on this task. *Combat Support: Shaping Air Force Logistics for the 21<sup>st</sup> Century* is a compilation of articles that communicates the essentials of the analyses completed over the last 6 years. The research was conducted to help the Air Force configure the Agile Combat Support system in order to meet AEF goals.



Major Todd J. Schollars, USAF

### GERMAN WONDER WEAPONS

Degraded Production and Effectiveness



The Editorial Advisory Board selected "German Wonder Weapons: Degraded Production and Effectiveness"—written by Major Todd J. Schollars—as the most significant article to appear in Vol XXVII, No 3 of the *Air Force Journal of Logistics*.